# **Agriculture Data**



Figure: Agriculture ERD

### **Entities and Relationships**

### **Farms**

- FarmID (PK)
- FarmName
- Location
- Size (Acres)
- FarmerID (FK  $\rightarrow$  Farmers.FarmerID)

#### **Farmers**

- FarmerID (PK)
- Name
- Age
- Experience (Years)
- FarmID (FK  $\rightarrow$  Farms.FarmID)

## **Crops**

- CropID (PK)
- CropName
- Season
- FarmID (FK  $\rightarrow$  Farms.FarmID)

#### Livestock

- LivestockID (PK)
- AnimalType
- Quantity
- FarmID (FK  $\rightarrow$  Farms.FarmID)

## **SoilQuality**

- SoilID (PK)
- FarmID (FK  $\rightarrow$  Farms.FarmID)
- pHLevel
- OrganicMatter
- NutrientLevels

## WeatherData

- WeatherID (PK)
- FarmID (FK  $\rightarrow$  Farms.FarmID)
- Temperature
- Humidity
- Rainfall
- WindSpeed

## **Irrigation**

- IrrigationID (PK)
- FarmID (FK  $\rightarrow$  Farms.FarmID)
- WaterSource
- Usage (Liters per Day)

## **Pesticides**

- PesticideID (PK)
- FarmID (FK  $\rightarrow$  Farms.FarmID)
- CropID (FK  $\rightarrow$  Crops.CropID)
- ChemicalName

ApplicationDate

#### **Fertilizers**

- FertilizerID (PK)
- FarmID (FK  $\rightarrow$  Farms.FarmID)
- CropID (FK  $\rightarrow$  Crops.CropID)
- NutrientComposition
- ApplicationDate

## **FarmEquipment**

- EquipmentID (PK)
- FarmID (FK  $\rightarrow$  Farms.FarmID)
- EquipmentName
- UsageHours
- LastMaintenanceDate

#### **Harvest**

- HarvestID (PK)
- FarmID (FK  $\rightarrow$  Farms.FarmID)
- CropID (FK  $\rightarrow$  Crops.CropID)
- YieldAmount (Tons)
- HarvestDate

## **MarketPrices**

- MarketID (PK)
- CropID (FK  $\rightarrow$  Crops.CropID)
- LivestockID (FK → Livestock.LivestockID)
- PricePerUnit
- DateUpdated

### **Storage**

- StorageID (PK)
- FarmID (FK  $\rightarrow$  Farms.FarmID)
- CropID (FK  $\rightarrow$  Crops.CropID)
- Capacity (Tons)
- CurrentStock

## **SupplyChain**

- SupplyID (PK)
- FarmID (FK  $\rightarrow$  Farms.FarmID)
- CropID (FK  $\rightarrow$  Crops.CropID)
- StorageID (FK  $\rightarrow$  Storage.StorageID)
- Destination

#### **GovernmentSubsidies**

- SubsidyID (PK)
  FarmerID (FK  $\rightarrow$  Farmers.FarmerID)
- Amount
- PurposeApprovalDate